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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,813	09/16/2003	Douglas B. Hill	204694.00101	1110

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PATENT ADMINISTRATOR
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EXAMINER	
OSORIO, RICARDO	
ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/662,813

Applicant(s)

HILL ET AL

Examiner

RICARDO L. OSORIO

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-35 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/27/2006.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 5-16, 19-23, 25, 27-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Westerman et al. (7,030,861).

Regarding claims 1-2, 5, 9, 10, and 12-14, 19, 20, 22, 23, 25, and 32-34, Westerman discloses a touch system (Fig. 7) comprising a touch surface (Fig. 7 (404)) to be contacted, or in close proximity to, by simultaneous finger contacts (col. 6, lines 27-28); at least one imaging device having an input region within its field of view looking generally across said touch surface into which multiple is/are moved to generate user input (col. 9, lines 47-54); and at least one processor communicating with said at least one imaging device and analyzing images, or image data, (Fig. 7, and col. 9, lines 40-43. It is inherent that the recognition processes in Fig. 7 require at least one processor), acquired by said at least one imaging device to determine the location on said touch surface where pointer contacts are made, or the action of pointers in said input region, (Fig. 7, reference characters 410-416) when said touch surface is contacted by multiple pointers, said processor examining said multiple pointer contacts to determine if said multiple pointer contacts, or actions, data represent a gesture (Fig. 7, reference characters 418-420) and when said

multiple pointer contacts represent a gesture, said processor executing a command associated with said gesture which updates a displayed image in accordance with said gesture (Fig. 7, reference characters 422-425, Figs. 1-6, and col. 9, line 63-col. 10, line 6).

Regarding claims 6-8, 21, 27-30, further, Westerman discloses detecting a first pointer contact on a touch surface that represents a left-click mouse event (Fig. 1, reference character 100, col. 3, lines 3-7, and col. 6, lines 46-48), detecting when a subsequent second pointer contact on said touch surface occurs within a threshold distance of said first pointer contact, during, and to the right of, said first pointer contact (col. 6, lines 30-34), and generating a right-click mouse event in response to said detected second pointer contact (Fig. 3, reference characters 175 and 182, col. 3, lines and col. 7, lines 22-34).

Regarding claims 11 and 31, Westerman discloses said simultaneous pointer contacts on said touch surface represent a scroll event, the direction of movement of the pointers over said touch surface subsequent to contact on said touch surface determining the direction of scroll (see Fig. 1, reference character 104).

Regarding claims 15 and 35, further, Westerman discloses said detected multiple pointers are examined to determine if one of the known gestures is being performed, each known gestured being associated with a different command (Fig. 7, reference characters 419-422).

Regarding claim 16, Westerman discloses that the movement of the multiple pointers relative to the touch surface determines the gesture being performed (see Figs. 1-6). ***Claim Rejections - 35***

USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerman (see above) in view of Gillespie et al. (2004/0178997).

Regarding claims 3 and 4, further, Westerman does not precisely teach of said multiple pointer contacts include a finger contact and an object contact, or multiple object contacts.

Gillespie teaches of multiple pointer contacts including a finger contact and an object contact, or multiple object contacts (see paragraph 34, paragraph 243, lines 9-12, paragraph 345, lines 4-7, and claims 1 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have contacts multiple fingers or other objects, as taught by Gillespie, in the device of Westerman to simulate on a touch surface mouse functions, as taught in Gillespie.

Claims 17, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerman (see above) in view of (Beaton et al. (6,310,610).

Regarding claims 17, 24 and 26, Westerman does not precisely teach of the pointer type determining the gesture being performed.

Beaton teaches of the pointer type determining the gesture being performed (Fig. 13B, reference characters 1360-1380).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the pointer type determine the gesture, as taught by Beaton, in the device of Westerman for providing intuitive GUIs and minimizing the need for users to memorize complicated menus or procedures (see col. 8, lines 21-24).

Allowable Subject Matter

5. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

Applicant argues that Westerman fails to teach capture images looking across the touch surface and process the captured images to detect pointer contacts.

Examiner disagrees because Westerman teaches that optical sensing systems could be used to image the hands and infer contact with the surface (see col. 9, lines 47-54).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 571-272-7676. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 571-272-7681.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RICARDO OSORIO
PRIMARY EXAMINER

Technology Division: 2629

RLO

January 6, 2007